

APPROVAL PAGE

SPACE TRANSPORTATION SYSTEM
OPERATION AND MAINTENANCE DOCUMENT

NONCONFORMANCE/PROBLEM
REPORTING AND CORRECTIVE
ACTION DATA CODE

Approved By:

Victor Segall

Victor Segali DOD VLS OMD Manager

Darwin V. Brown OMD Manager

# LIST OF EFFECTIVE PAGES

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#### SECTION I

# UTILIZATION OF DATA CODE

#### 1.1 GENERAL

DURING STS GROUND OPERATIONS, EACH OPERATION OR MAINTENANCE ACTION PERFORMED ON FLIGHT OR GROUND EQUIPMENT MUST BE FULLY AND ACCURATELY DOCUMENTED. THE VOLUME OF DATA THAT MUST BE COLLECTED, STORED, AND DISSEMINATED, RELATED TO OPERATIONS AND MAINTENANCE (OWM) ACTIONS ON EQUIPMENT, LENDS ITSELF TO THE USE OF MANAGEMENT INFORMATION AND RETRIEVAL TECHNIQUE. THE USE OF ELECTRONIC DATA PROCESSING EQUIPMENT FOR THE ABOVE PURPOSES REQUIRES THAT THE DATA INPUT BE IDENTIFIED OR CODED IN SUCH A MANNER THAT IT CAN BE READ BY THE DATA PROCESSING INPUT/OUTPUT DEVICE.

1.2 NON CONFORMANCE/PROBLEM REPORTING AND CORRECTIVE ACTION (PRACA) CODE STRUCTURE AND CHARACTERISTICS

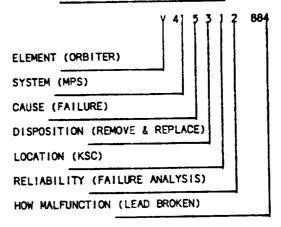
THE NONCONFORMANCE/PRACA DATA CODE IS A TEN ALPHA NUMERIC CHARACTER CODE. THE FIRST SEVEN CHARACTERS OF THIS CODE ARE USED FOR MANAGEMENT TRENDING OF THE DATA AND THE LAST THREE CHARACTERS ARE USED TO DESCRIBE THE DETAILS OF THE MALFUNCTION.

# 1.3 DATA COLLECTION

DATA COLLECTION CODING IS USED TO IDENTIFY AND DOCUMENT, FOR HISTORICAL RECORD PURPOSES, DATA PERTINENT TO DISCREPANCIES OR PROBLEMS RELATED TO HARDWARE OR SOFTWARE. NONCONFORMANCE PRACA DATA COLLECTION CODES ARE A TENCHARACTER CODE. THE FIRST POSITION IS THE ELEMENT CODE (TABLE 2-1) WHICH CONSISTS OF AN ALPHABETIC CHARACTER TO

IDENTIFY THE ELEMENT. THE SECOND & THIRD POSITIONS ARE THE SYSTEM CODE (TABLES 2-2, 2-3, & 2-4) WHICH CONSISTS OF TWO CHARACTERS TO DESCRIBE THE SYSTEM AFFECTED. THE FOURTH POSITION IDENTI-FIES THE CAUSE OF THE NONCONFORMANCE/ PROBLEM (TABLE 2-5). THE FIFTH POSITION IDENTIFIES DISPOSITION (TABLE 2-6). THE SIXTH POSITION IDENTIFIES THE LOCATION (TABLE 2-7). THE SEVENTH POSITION IDEN-TIFIES WHETHER RECURRENCE CONTROL AND FAILURE ANALYSIS IS REQUIRED (TABLE 2-8). THE EIGHTH, NINTH, AND TENTH POSITIONS IDENTIFY THE HOW MALFUNCTION-TIONED CODE (TABLES 2-9 AND 2-10) WHICH CONSISTS OF THREE NUMBERIC CHARACTERS TO DESCRIBE THE EQUIPMENT MALFUNCTION. ILLUSTRATE DATA COLLECTION APPLICATION OF THE NONCONFORMANCE/PRACA CODE, ASSUME A PRESSURE SWITCH IN THE ORBITER FOR THE MAIN PROPULSION SYSTEM (MPS) AT KSC MALFUNCTIONED DURING THE MPS PERIFILA-TION TEST. THE SWITCH WAS REMOVED AND REPLACED AND ANALYSIS DETERMINED THE PROBLEM WAS DUE TO A BROKEN LEAD. IN THE EXAMPLE THE NONCONFORMANCE/PRACA CODE WOULD BE AS FOLLOWS:

# NONCONFORMANCE/PRACA CODE



# SECTION II

# DATA COLLECTION CODES

# 2.1 ELEMENT CODE

THIS CODE (TABLE 2-1) CONSISTS OF ONE ALPHABETIC CHARACTER AND IDENTIFIES THE ELEMENT.

# 2.2 FLIGHT SYSTEM CODE

THIS CODE (TABLE 2-2) CONSISTS OF TWO NUMERIC CHARACTERS AND IS USED TO IDENTIFY THE SYSTEM AFFECTED.

# 2.3 GROUND SYSTEM CODE

THIS CODE (TABLE 2-3) CONSISTS OF TWO ALPHABETIC CHARACTERS AND IS USED TO IDENTIFY THE GROUND SYSTEM AFFECTED.

# 2.4 EXPERIMENT CODE

THIS CODE (TABLE 2-4) CONSISTS OF TWO NUMERIC CHARACTERS AND IS USED TO IDENTIFY THE TYPE OR EXPERIMENT WHEN THE ELEMENT (FIRST CHARACTER) IS "P".

# 2.5 CAUSE CODE

THIS CODE (TABLE 2-5) CONSISTS OF ONE ALPHABETIC OR NUMERIC CHARACTER AND IDENTIFIES THE CAUSE OF THE NONCONFORMANCE/PROBLEM.

# 2.6 DISPOSITION CODE

THIS CODE (TABLE 2-6) CONSISTS OF ONE ALPHABETIC OR NUMBERIC CHARACTER AND IDENTIFIES THE DISPOSITION OF THE NONCONFORMANCE/PROBLEM.

a. -

# 2.7 LOCATION CODE

THIS CODE (TABLE 2-7) CONSISTS OF ONE ALPHABETIC OR NUMERIC CHARACTER AND IDENTIFIES THE LOCATION OF THE NONCONFORMING HARDWARE.

### 2.8 RELIABILITY STATUS CODE

THIS CODE (TABLE 2-8) CONSISTS OF ONE NUMERIC CHARACTER AND IDENTIFIES WHETHER RECURRENCE CONTROL & FAILURE ANALYSIS IS PERFORMED.

### 2.9 HOW MALFUNCTIONED CODE

THIS CODE (TABLE 2-9 FOR ALPHEBETIC ORDER, TABLE 2-10 FOR NUMERIC ORDER) CONSISTS OF THREE NUMERIC CHARACTERS AND IS USED TO DESCRIBE THE EQUIPMENT MALFUNCTION.

# TABLE 2-1. ELEMENT CODE

ELEMENT	CODE
BOO STER	В
MAIN ENGINE	E
FACILITY	F
GSE	G
PAYLOAD/EXPERIMENT	P
EXTERNAL TANK	Т
ORBITER	٧
SHUTTLE (OVERALL)	S
CUSE ONLY WHEN OTHER	
CODES DO NOT APPLY)	

### TABLE 2-2. FLIGHT SYSTEM CODES

LIST OF NUMERIC CODES TO BE USED AS THE SECOND AND THIRD CHARACTERS TO THE NONCONFORMANCE/PRACA DATA CODE. USE TABLE 2-4 WHEN THE ELEMENT CODE (FIRST CHARACTER) IS "P".

- 00 NOT OTHERWISE CODED
- ORBITER EXPERIMENTS 01 -
- STRUCTURES AND THERMAL 04 CONTROL/PROTECTION
- 05 PURGE, VENT AND DRAIN 06 THERMAL CONTROL SYSTEM (GENERAL - USE WHEN OTHER TCS CODES DO NOT APPLY)
- THERMAL/AERODYNAMICS 07 -
- STRUCTURAL DYNAMICS/ 08 -
  - STRUCTURE S
- THERMAL PROTECTION SYSTEM 09 (GENERAL - USE WHEN OTHER TPS CODES DO NOT APPLY)
- WING 10 -
- 11 WING LEADING EDGE
- 12 -WING BOX
- **ELEVONS** 13
- 16
- WING TCS WING TPS 19
- VERTICAL STABILIZER 20
- VERTICAL STABILIZER LEADING 21 **EDGE**
- VERTICAL FIN 22 -
- RUDDER/SPEED BRAKE 23
- 26 VERTICAL/STABILIZER TCS
- VERTICAL STABILIZER TPS 29 -
- FUSELAGE 30 -
- FUSELGE, UPPER FORWARD

### TABLE 2-2. FLIGHT SYSTEM CODES (CONTINUED)

- FUSELAGE, LOWER FORWARD
- 33 CREW MODULE
- FUSELAGE, MID FUSELAGE, AFT 35
- FUSELAGE, TCS
- 37 - PAYLOAD BAY DOORS
- FUSELAGE PURGE, VENT AND DRAIN
- 39 - FUSELAGE TPS
- 40 - PROPULSION AND POWER
- 41 MAIN PROPULSION
- 42 REACTION CONTROL
- 43 ORBITAL MANUEVERING
- 45 ELECTRICAL POWER GENERATION AND PRSD
- 46 AUXILIARY POWER UNIT
- 50 MECHANICAL
- 51 LANDING GEAR
- 52 -BRAKE/SKID CONTROL. DECELERATION AND RECOVERY
- DOCKING MECHANISM
- 54 PAYLOAD RETENTION/DEPLOYMENT
- 55 PYROTECHNICS AND RANGE SAFETY
- ATTACHMENT/SEPARATION
- 57 AERO SURFACE CONTROL
- 58 -**HYDRAULIC**
- ACTUATION MECHANISMS 59
- ENVIRONMENTAL CONTROL & LIFE 60 SUPPORT
- 61 ATMOSHPHERIC REVITALIZATION

Ξ

- 62 LIFE SUPPORT
  63 ACTIVE THERMAL CONTROL
  64 AIRLOCK SUPPORT

# TABLE 2-2. FLIGHT SYSTEM CODES (CONTINUED)

65 - CREW PROVISIONS AND ACCOMMODATIONS

66 - CREW EQUIPMENT

67 - BIOMEDICAL

70 - AVIONICS

71 - GUIDANCE AND NAVIGATION

72 - DATA PROCESSING

73 - DISPLAYS AND CONTROLS

74 - COMMUNICATIONS AND TRACKING

75 - INSTRUMENTATION (OPERATIONAL)

76 - ELECTRICAL POWER
DISTRIBUTION AND CONTROL

77 - INTERCONNECTING WIRING

78 - INSTRUMENTATION, DEVELOPMENT

79 - FLIGHT CONTROL 80 - STRUCTURES

BO - STRUCTURES
ACCESS/PENETRATION

81 - PALLET

82 - IGL00

83 - AIRLOCK (CPSE)

84 - INSTRUMENT POINTING SYSTEM

90 - ORBITAL FLIGHT TEST INTEGRATED SOFTWARE

91 - PRIMARY AVIONICS SYSTEM SOFTWARE

92 - BACKUP FLIGHT SYSTEM SOFTWARE

93 - SOME SOFTWARE

94 - DYNAMIC INTEGRATED TEST SOFTWARE

95 - TEST CONTROLLER SUPERVISOR SOFTWARE

96 - GENERAL PURPOSE COMPUTER --INITIAL PROGRAM LOAD SOFT WARE

97 - MISCELLANEOUS FLIGHT

SOFTWARE

99 - AUTOMATIC CHECKOUT EQUIPMENT

# TABLE 2-3. GROUND SYSTEM CODES

LIST OF ALPHA CODES TO BE USED AS THE SECOND AND THIRD CHARACTERS OF THE NONCONFORMANCE/PRACA CODE.

#### COOLANT SYSTEM CL

**AMMONIA** AN

COOLANT WATER  $\infty$ 

FREON PR

# COMMUNICATIONS SYSTEM

TELEPHONE, DATA, AND SPECIAL AUDIO

DATA TRANSMISSION DT

FIBER OPTIC TRANSMISSION FB SYSTEM/LIGHTWAVE

COMMUNICATIONS SYSTEM

CS **OPERATIONAL** INTERCOMMUNICATION SYSTEM

PAGING & WARNING

PHOTO-OPTICAL

RF (RADIO FREQUENCY) RF

TEST AND SWITCHING SW

TIMING AND COUNTDOWN TC

TELEVISION TY

WIDEBAND TRANSMISSION

# ELECTRICAL POWER AND FACILITY

## GROUNDING SYSTEMS

60 HERTZ

400 HERTZ AS

SD

SPECIAL POWER (DOD) SPECIAL POWER (VO)

SPECIAL POWER (TECHNICAL SUPPORT)

FACILITY GROUNDING FG

DIRECT CURRENT DC

CA **CABLES** 

CATHODIC PROTECTION œ

ĒΧ EMERGENCY POWER

GENERATORS, ELECTRICAL

Ξ

### TABLE 2-3. GROUND SYSTEM CODES (CONTINUED)

#### ELECTRICAL POWER AND FACILITY EP

## GROUNDING SYSTEMS (CONT'D)

UP UNINTERRUPTED POWER SUPPLY (UPS)

LE SPECIAL LIGHTING EQUIPMENT

LIGHTNING DETECTION B SYSTEMS

LIGHTNING PROTECTION LU

LIGHTNING MEASUREMENT Ľ SYSTEMS

#### EQ. EQUIPMENT

TE TEST EQUIPMENT

PROTECTIVE EQUIPMENT PROOF TEST EQUIPMENT PE

MAINTENANCE EQUIPMENT ME

INSPECTION EQUIPMENT IE

CF CLEAN FACILITIES

AIR COMPRESSORS ٨J

AY ACOUSTIC/YIBRATION

**EQUIPMENT** 

Œ POTTING EQUIPMENT

CLEANING EQUIPMENT СK

CX CHEMICAL ANALYSIS

**EQUIPMENT** 

ER EARTH RESOURCES EQUIPMENT

MATERIAL HANDLING MH

**EQUIPMENT** 

ELECTROMAGNETIC ANALYSIS EM

**EQUIPMENT** 

NON DESTRUCTUVE ND

INSPECTION (TEST)

HY HYDRAULIC EQUIPMENT

AN

ALIGNMENT EQUIPMENT FOOD PROCESSING EQUIPMENT FP GROUND MAINTENANCE GM

**EQUIPMENT** 

FK FORKLIFTS/PALLET STACKERS

PAINTING EQUIPMENT PP

PLUMBING/PLUMBING SHOP

**EQUIPMENT** 

## TABLE 2-3. GROUND SYSTEM CODES (CONTINUED)

#### EQUIPMENT (CONT'D) EQ

VEHICLE SHOP EQUIPMENT

ELECTRICAL SHOP EQUIPMENT ΕZ

METAL WORKING MACHINERY MW

AND EQUIPMENT

WOOD WORKING MACHINERY WW

AND EQUIPMENT

FF FIRE FIGHTING, RESCUE, AND SAFETY EQUIPMENT

BUILDING MAINTENANCE BM

**EOUIPMENT** 

CONVEYORS CY

DU

DUST COLLECTORS
JANITORIAL EQUIPMENT JA

REFRIGERATION EQUIPMENT RW

TANKS

# FLIGHT HARDWARE TRANSPORTATION

## & HANDLING SYSTEMS

HANDLING AND ACCESS HA

TG TUGS

TUGS/BARGE (MARINE)

TOW/HANDLING EQUIPMENT TO

RETRIEVAL TOOLS/FIXTURES RT

TRANSPORTERS AND DOLLIES

#### FACILITIES SUPPORT SYSTEMS FN

CR CRANES (FIXED)

E۷ **ELEVATORS** 

EC ENVIRONMENTAL CONTROL

SYSTEM/EQUIPMENT

FD FLAME DEFLECTORS

FLOOD LIGHT SYSTEMS FT

SR STRUCTURAL

UTILITIES CONTROL UC

HT HOISTS

MOUNT MECHANISMS

PR POWER OPERATED DOORS

Ξ

SK SCALES

OFFICE TRAILERS

# TABLE 2-3. GROUND SYSTEM CODES (CONTINUED)

# GA GASEOUS SYSTEMS

GAS CARTS GASEOUS NITROGEN GN GASEOUS HYDROGEN GH GASEOUS OXYGEN GASEOUS OXYGEN/NITROGEN GO ON AIR (PNEUMATIC, Αi COMPRESSED) GASEOUS HELIUM K-BOTTLE CARTS COMPRESSED GAS TRAILERS GT MOBILE COMPRESSORS MOBILE REFUELERS MOBILE RECHARGER PRESSURIZATION/PURGE PG GASES GAS/LIQUID ANCILLARY SG SUPPORT EQUIPMENT

# IN INSTRUMENTATION SYSTEMS

LCC (LAUNCH CONTROL COMPLEX) MEASUREMENTS VEHICLE MEASUREMENTS GSE VM TELEMETRY CHECKOUT C-BAND CHECKOUT TL CB SIGNAL ANALYSIS MONITOR RANGE SAFETY CHECKOUT TACAN (TACTICAL AIR COMMAND AND NAVIGATION IM RS ΤK SYSTEM) MICROWAVE SCANNING BEAM ML LANDING SYSTEM (MSBLS) METEROLOGICAL MT PRECISION LASER TRACKING PL SYSTEM (PLTS)
INSTRUMENTATION TEST IT EQUIPMENT ENVIRONMENTAL & SPECIAL MEASUREMENTS LIGHTNING WARNING

# TABLE 2-3, GROUND SYSTEM CODES (CONTINUED)

## INSTRUMENTATION SYSTEMS

LETF MEASUREMENTS

NASA-6 AIRCRAFT NA

MEASUREMENTS

GSE INSTRUMENTATION

## LAUNCH PROCESSING SYSTEMS

CENTRAL DATA SYSTEM CD

CHECKOUT, CONTROL, AND CM MONITORING SYSTEM

SPACELAB PROCESSING

GROUND COMPUTER SYSTEMS RECORD AND PLAYBACK

SYSTEM

# LIFE SUPPORT SYSTEMS

AIR PACKS AP

ENSEMBLES EN

MASKS MA

ASTRO PURGE TRANSFER VENT

HOSELINE BREATHING HB

**EQUIPMENT** 

BREATHING SUPPLY

RESUSCITATORS AIR (LIFE SUPPORT) ΑZ

# PRIME MOVERS

ST

AUTO TRACTORS SPECIAL TRACTORS CRAWLER/TRANSPORTER

CONSTRUCTION EQUIPMENT

Ę

MOBILE CRANES

LT LIQUID TANKERS

FARM TRACTORS
TRUCKS/VANS

ΤÌ

**TRAILERS** TR

## TABLE 2-3. GROUND SYSTEM CODES (CONTINUED)

#### PROPELLANT SYSTEMS PS

LIQUID OXYGEN Ľ

LIQUID HYDROGEN LH

MMH (MONOMETHYL MM

HYDRAZINE)

MOBILE VAPOR SCRUBBERS м٧

N204 (NITROGEN TETROXIDE) N5H4 (HYDRAZINE) COMPUTER, PROPELLANT NO

NH

CJ

LOADING

FC FUEL CELLS

FH

FUEL CELLS, LH<sub>2</sub> FUEL CELLS, LOX HYPERGOLIC FUEL FO

(HYDRAZINE BASED FUELS)

# SAFETY AND UTILITY SUPPORT

HEATING, VENTILATION, AND AIR CONDITIONING Н٧

ABORT ADVISORY

EMERGENCY EGRESS

FIRE/GAS DETECTION GD

WATER PUMPING AND GENERAL

DISTRIBUTION

WATER (GLYCOL)

WATER (POTABLE) WP

WATER (INDUSTRIAL) WI

WATER (FIREX) WF

WATER ACOUSTIC/QUENCH

FIRE ALARM FA

SANITARY AND SEWAGE SS

DISPOSAL

DEIONIZED WATER

CHILLED WATER CW

LN LIQUID NITROGEN

VACUUM ٧A

AL ALCOHOL

EMERGENCY LIGHTING EL

HYPERBARIC CHAMBER

PYROTECHNIC

SPRINKLER SYSTEMS SY

02 ANALYZERS

#### TABLE 2-3. GROUND SYSTEM CODES (CONTINUED)

#### SF SAFETY AND UTILITY SUPPORT

### (CONT'D)

- WX WASTE TREATMENT-INDUSTRIAL
- HOT WATER-DOMESTIC CHEMICAL SPRINKLER SYSTEM
- SC SOLAR HEATING
- HIGH TEMP-HOT WATER DISTRIBUTION SYSTEM
- H20 HIGH PRESSURE
- HVAC CONDENSOR WATER HC
- HVAC HOT WATER
- FAN SYSTEM
- AR
- ROOM/AREA CONDITIONS CONTROL AIR SUBSYSTEM CN
- DO DIESEL FUEL
- PROPANE PN
- STEAM

#### VEHICLE PHYSICAL INTERFACE **VP**

# SYSTEMS

- SM TAIL SERVICE MAST (TSM)
- SERVICE AND ACCESS ARMS
- MOBILE LAUNCHER SUPPORTS
- & HOLDDOWN ARMS UMBILICALS

#### MISSION CONTROL CENTER ZZ

#### RG ROADS AND GROUNDS

- BRIDGES
- DIKES AND CANALS LANDSCAPING  $\infty$

- PRIMARY ROADS STREETS AND PARKING LOTS
- PEST CONTROL
- PQ SI SECONDARY ROADS
- SANITATION
- WATERWAYS =

# TABLE 2-3. GROUND SYSTEM CODES (CONTINUED)

## SO SOFTWARE

COMS OPERATING SYSTEM
COMS REAL TIME DATA MANAGEMENT CG SYSTEM/PERIPHAL DATA RECORDER SHARED PERIPHAL AREA COMS GROUND OPERATIONS AEROSPACE LANGUAGE CCMS TEST CONTROLLER CI SUPERV I SOR CCMS CONTROL LOGIC -CU PREREQUI SITE COMS CONTROL LOGIC - REACTIVE COMS DISPLAY SKELTON CZ CDS HONEYWELL EXECUTIVE CDS SUPPORT SOFTWARE (IBM) DΕ ÐΙ CDS APPLICATION SOFTWARE (COMPUTER APPLICATIONS ROUTINES) CDS SHUTTLE GROUND OPERATIONS D٧ SIMULATOR/VEHICLE SIMULATOR INTERFACE CDS REAL TIME INTERFACE/TEST DR DATA RETRIEVAL ROUTINE CDS APPLICATIONS PROGRAM DP LIBRARY MAINTENANCE CDS MATH MODELS DM COS TEST CONFIGURATION DD IDENTIFIER CDS/COMS DATA BANK DB COS UNIQUE APPLICATION DN RECORD AND PLAYBACK SYSTEM RP

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# TABLE 2-4. EXPERIMENT CODES

00 - NOT OTHERWISE CODED
01 - ORBITER/PAYLOAD INTERFACE
02 - TELEOPERATOR RETRIEVAL
SYSTEM
03 - PALLET
10 - COMMUNICATION/NAVIGATION
20 - EARTH OBSERVATIONS
30 - ATMOSPHERIC PHYSICS
40 - HIGH ENERGY PHYSICS
50 - LIFE SCIENCE
60 - SPACE TECHNOLOGY
70 - SPACE EXPLORATION
80 - SPACE PHYSICS
90 - ASTRONOMY

# TABLE 2-5. NONCONFORMANCE/PRACA "CAUSE" CODE

CAUSE	CODE
OPERATOR ERROR DESIGN DEFICIENCY PROCEDURE/WORK AUTH ERROR FAB/INSTALL/BUILDUP ERROR DISASSY/REFURB DEF. CALIBRATION ERROR WEAR OUT/EXPIRED LIMITED LIFE FAILURE MATERIALS DEFICIENCY VENDOR RESPONSIBILITY SHIPPING/HDLG DAMAGE CONTAMINATION CORROSION LAUNCH DAMAGE LANDING DAMAGE RECOVERY DAMAGE S/W PROGRAM/CODING ERROR S/W COMPILE/EDIT ERROR S/W MEDIA/BAD COPY/PARIT UNEXPLAINED ANOMALY (GHOST/PHANTOM) INSUFFICIENT DATA	1 2 3 4 5 6 7 8 9 A B C D E F G H J
NO DISCREPANCY	

TABLE 2-6. NONCONFORMANCE/PRACA #D1SPOSITION# CODE

DISPOSITION	CODE
REPAIR (STANDARD)	1
REPAIR (NON-STD)	2
REMOVE & REPLACE	3
REWORK TO DRAWING	4
CLEAN	4 5
ADJUST	6
CALIBRATE	7
RETEST ONLY	8
USE AS IS	9
SCRAP	Ā
SEND TO VENDOR/RESP.	В
ORGANIZATION	_
DOWNGRADE TO TEST USE ONLY	С
ENGINEERING CHANGE	ă
	Ē
WAIVER/DEVIATION	F
REVISE CODE/SOFTWARE	G
RECOMPLILE/RE-EDIT	Н
RECOPY/RECOMPILE MEDIA	• • •
REVISE DOCUMENTATION	Ĵ
NO ACTION TAKEN	K

TABLE 2-7. NONCONFORMANCE/PRACA "LOCATION" CODE

LOCATION	CODE
FLIGHT HARDWARE	
KSC VLS SLS/CLS OTHER	2 3 4
GSE AT KSC	
OPF BAY 1 OPF BAY 2 PAD A PAD B LCC VAB CCF SLF/CLS/SLS HMF O&C VPF CCAFS MLP 1 MLP 2 CRAWLER 1 CRAWLER 2 OTHER	56789ABCDEFGHJKLM
GSE AT VAFB	
LANDING/MEF (V17/V18) OMCF/SEF (V19/V19A) HMCF (V21) LP(V23) LCC/VLPS-SVAFB (V88/ (V84) VLPS-NVAFB (V34) PRF (V30) SRSF (V31) TCF (V33) SDAF (V32) LOGISTICS (V88) OTHER	NPQRS TUVWXYZ

TABLE 2-8. NONCONFORMANCE/PRACA #RELIABILITY# CODE

RELIABILITY STATUS	CODE
RECURRENCE CONTROL	1
FAILURE ANALYSIS	2
RECURRENCE CONTROL &	3
FAILURE ANALYSIS NO RECUR CONT. OR FAIL.	4
ANALYSIS	

# TABLE 2-9. HOW MALFUNCTIONED CODES, ALPHABETICAL LISTING

# CODE DESCRIPTION

- 314 ACCELERATION INCORRECT
- 931 ACCIDENTAL OR INADVERTENT
  OPERATION, RELEASE, OR ACTIVATION.
  USE CODE 386 IF ITEM WAS LOST IN
  FLIGHT.
- 127 ADJUSTMENT OR ALIGNMENT IMPROPER
- 709 ADMINISTRATIVE CONDEMNATION
- 651 AIR IN SYSTEM
- 961 ANODE CURRENT HIGH
- 007 ARCING, ARCED
- 627 ATTENUATION INCORRECT
- 694 AUDIO AND VIDEO FAULTY
- 693 AUDIO FAULTY
- 652 AUTOMATIC ALIGNMENT TIME EXCESSIVE
- 656 AZIMUTH INCORRECT
- 838 B PLUS INCORRECT
- 658 BEARING DESTINATION (STATION)
  ERROR
- 710 BEARING FAILURE OR FAULTY
- 780 BENT, BUCKLED, COLLAPSED, DENTED, DISTORTED, OR TWISTED

=

- 631 BIAS VOLTAGE INCORRECT
- 135 BINDING, STUCK, OR JAMMED

> TABLE 2-9. HOW MALFUNCTIONED CODES, ALPHABETICAL LISTING (CONTID)

CODE

DESCRIPTION

303 BIRD STRIKE DAMAGE

711 BLANKING IMPROPER

221 BOND FAULTY

003 BOUNCE

070 BROKEN

963 BROKEN FILAMENT/CATHODE TERMINAL

108 BROKEN, FAULTY, OR MISSING SAFETY WIRE OR KEY

719 BROKEN OR FRAYED BONDING OR GROUND WIRE

720 BRUSH FAILURE/WORN EXCESSIVELY

214 BUBBLE/BLISTIR

900 BURNED OR OVERHEATED

080 BURNED OUT OR DEFECTIVE LAMP, METER, OR INDICATING DEVICE

111 BURST OR RUPTURED

469 BUSHING WORN OR DAMAGED

251 CALIBRATION FAULTY

250 CALIBRATION OVERDUE

025 CAPACITANCE INCORRECT

027 CAPACITOR FAULTY

698 CARD, PROGRAM, OR CHECKOUT FAULTY

# TABLE 2-9. HOW MALFUNCTIONED CODES, ALPHABETICAL LISTING (CONT'D)

CODE	DESCRIPTION
969	CAVITY DOES NOT RESONATE
130	CHANGE OF VALUE
150	CHATTERING
910	CHIPPED
035	CLEANLINESS INCORRECT/VOIDED
181	COMPRESSION LOW
380	COMPRESSOR DAMAGED, REASON UNKNOWN
956	COMPUTER MECHANICAL EQUIPMENT MALFUNCTION
940	COMPUTER SOFTWARE ERROR
028	CONDUCTANCE INCORRECT
015	CONDUCTOR FAULTY
014	CONDUCTOR INSULATION FAULTY
016	CONDUCTOR SHIELD FAULTY
159	CONFIGURATION INCORRECT
160	CONTACTS/CONNECTION DEFECTIVE (PINS BENT/RECESSED ETC)
989	COOLANT FLOW RATE LOW
970	COOLANT LEAK
170	CORRODED, MILD TO MODERATE
667	CORRODED, SEVERE

TABLE 2-9. HOW MALFUNCTIONED CODES, ALPHABETICAL LISTING (CONT'D)

CODE

**DESCRIPTION** 

606 COUNTER RUN OFF, POSITION INDICATOR

190 CRACKED

605 CRAZED

029 CURRENT INCORRECT

116 CUT

972 DAMAGED INPUT PROBE

973 DAMAGED OUTPUT PROBE

943 DATA ERROR

955 DATA LINK HIGH ERROR RATE

729 DECOUPLED

846 DELAMINATED/DEBONDED

209 DENSITY TEST FAILURE

033 DE STROYED OR REMOVED FROM SERVICE AS A RESULT OF TESTING

117 DETERIORATED

601 DETONATION

290 DIAGNOSTIC/AUTOMATIC TEST FAILURE

093 DIMENSION(S) INCORRECT

024 DIODE FAULTY

### TABLE 2-9. HOW MALFUNCTIONED CODES, ALPHABETICAL LISTING (CONT'D)

CODE DESCRIPTION

230 DIRTY, CONTAMINATED, OR SATURATED BY FOREIGN MATERIAL

017 DISCOLORED/STAINED

958 DISPLAY INCORRECT

957 DISPLAY MISSING

657 DISTANCE MEASUREMENT ERROR, NAVIGATION EQUIPMENT

018 DRAWING/SPECIFICATION ERROR

009 DRIVE TRAIN/MOTOR FAULTY

962 ELECTRONIC POWER LOW

654 ELEVATION INCORRECT

932 ENGAGE, LOCK, OR UNLOCK INCORRECT

475 ENGINE FAILED TO START

142 ENGINE REMOVED, EXCESSIVE MAINTENANCE

911 ENGINE TCTI CORRECTION CODE

632 EXPENDED (THERMAL BATTERY, FIRE EXTINGUISHER, ETC)

204 EXPLOSION

424 EXTERNAL POWER SOURCE

602 FAILED OR DAMAGED DUE TO MALFUNCTION OR ASSOCIATED EQUIPMENT OR ITEM

TABLE 2-9. HOW MALFUNCTIONED CODES, ALPHABETICAL LISTING (CONT'D)

CODE

DESCRIPTION

- 242 FAILED TO OPERATE OR FUNCTION, SPECIFIC REASON UNKNOWN
- 610 FAILS TO TRACK
- 013 FAN FAULTY
- 022 FLAKING/PEELING
- 128 FLOW RATE INCORRECT
- 037 FLUCTUATES, UNSTABLE, OR ERRATIC
- 178 FLUID INCORRECT
- 990 FOCUS CURRENT FAULTY
- 010 FOCUS POOR OR INCORRECT
- 301 FOREIGN OBJECT DAMAGE
- 748 FREQUENCY ERRATIC OR INCORRECT
- 981 FREQUENCY INSTABILITY
- 991 FREQUENCY OUT OF BAND
- 177 FUEL FLOW INCORRECT
- 472 FUSE BLOWN OR DEFECTIVE CIRCUIT PROTECTOR
- 254 GAGE/METER READING INCORRECT
- 088 GAIN INCORRECT
- 223 GAP FILLER DAMAGED
- 224 GAP FILLER MISSING

TABLE 2-9.	HOW MALFUNCTIONED CODES, ALPHABETICAL LISTING
	(CONT'D)

	(CONT'D)
CODE	DESCRIPTION
001	GASSY
625	GATING INCORRECT
206	GOUGES
653	GROUND SPEED FRROR EXCESSIVE
300	GROUNDED ELECTRICALLY
824	GYRO FAULTY
086	HANDLING IMPROPER
041	HAZARDOUS TO PERSONNEL OR EQUIPMENT
330	HUM EXCESSIVE
249	HYDROSTAT OVERDUE
936	IDENTIFICATION MISSING OR ERRONEOUS
006	IGNITER FAILURE
816	
917	IMPENDING FAILURE OR LATENT DEFECT INDICATED BY NONDESTRUCTIVE INSPECTION. DO NOT USE IF OTHER CODES APPLY.
916	IMPENDING OR INCIPIENT FAILURE INDICATED BY ANALYSIS
626	S INDUCTANCE INCORRECT
. 98	7 INPUT PULSE DISTORTION

247 INSTALLED/ASSEMBLED IMPROPERLY

=

TABLE 2-9. HOW MALFUNCTIONED CODES, ALPHABETICAL LISTING (CONT!D)

(CONT'D) DESCRIPTION CODE 350 INSULATION BREAKDOWN INTEGRATED CIRCUIT FAULTY INTERFERENCE (PHYSICAL) 021 INTERMITTENT 901 374 INTERNAL FAILURE KEYWAY OR SPLINE DAMAGED OR WORN 481 LAUNCH DAMAGE 158 LEAD BROKEN 884 381 LEAKING, INTERNAL OR EXTERNAL 561 LIMITS UNADJUSTABLE 382 LIQUID LOCK 383 LOCK ON MALFUNCTION 447 LOGIC WRONG 730 L00SE LOOSE OR DAMAGED BOLTS, NUTS, SCREWS, RIVETS, FASTENERS, CLAMPS, OR OTHER COMMON HARDWARE 410 LUBRICATION IMPROPER 386 MAINTENANCE ACTION DUE TO LOST IN FLIGHT OCCURRENCE

· 246 MAINTENANCE IMPROPER OR FAULTY

TABLE 2-9. HOW MALFUNCTIONED CODES, ALPHABETICAL LISTING (CONTID)

CODE DESCRIPTION

604 MANIFOLD PRESSURE BEYOND LIMITS

372 METAL ON MAGNETIC PLUG

253 MISFIRES

092 MI SMATCHED PARTS, ETC

750 MISSING

106 MISSING BOLTS, NUTS, SCREWS, RIVETS, FASTENERS, CLAMPS, OR OTHER COMMON HARDWARE

064 MODULATION INCORRECT

425 NICKED

799 NO DEFECT

800 NO DEFECT. COMPONENT REMOVED AND/OR REINSTALLED TO FACILITATE OTHER MAINTENANCE.

812 NO DEFECT. INDICATED DEFECT CAUSED BY ASSOCIATED EQUIPMENT MALFUNCTION

805 NO DEFECT. NOT OTHERWISE CODED ELECTRICAL, HYDRAULIC, AIR, FUEL, OXYGEN, OIL, ETC; LINES, MECHANICAL LINKAGE AND CABLES, SERVICING A COMPONENT REMOVED/DISCONNECTED AND/OR INSTALLED/CONNECTED TO FACILITATE OTHER MAINTENANCE.

948 NO DEFECT. OPERATOR ERROR

> TABLE 2-9. HOW MALFUNCTIONED CODES, ALPHABETICAL LISTING (CONT'D)

#### CODE

#### DESCRIPTION

- 802 NO DEFECT. PARTIAL TECHNICAL ORDER OR OMI COMPLIANCE
- 796 NO DEFECT. REMOVED FOR RELIABILITY ASSESSMENT
- 804 NO DEFECT. REMOVED FOR SCHEDULED MAINTENANCE OR MODIFICATION
- 803 NO DEFECT. REMOVED FOR TIME CHANGE
- 801 NO DEFECT. TECHNICAL ORDER OR OMI COMPLIANCE
- 798 NO DEFECT. TECHNICAL ORDER OR OMI NOT APPLICABLE. EQUIPMENT TO BE REPLACED, MODIFIED, OR NOT INSTALLED.
- 797 NO DEFECT. TECHNICAL ORDER OR OMI PREVIOUSLY COMPLIED WITH
- 793 NO DEFECT. TIME COMPLIANCE TECHNICAL INSTRUCTION KIT RECEIVED BY BASE SUPPLY OR PARTS ARE AVAILABLE IN SUPPLY.
- 607 NO-GO INDICATION. SPECIFIC REASON UNKNOWN

<u>:</u>

- 008 NOI SY
- 941 NON-PROGRAMMED HALT
- 396 OIL BREATHING EXCESSIVE
- 398 OIL CONSUMPTION EXCESSIVE

# S00000-6-3

### TABLE 2-9. HOW MALFUNCTIONED CODES, ALPHABETICAL LISTING (CONT'D)

CODE

DESCRIPTION

- 603 OIL IN INDUCTION SYSTEM
- 450 OPEN
- 942 OPERATION OR ADDRESS ENTRY ILLEGAL
- 457 OSCILLATING
- 458 OUT OF BALANCE
- 609 OUT OF TRACK
- 255 OUTPUT INCORRECT
- 992 OUTPUT PULSE DISTORTION
- 464 OVERSPEED
- 638 PARAMETERS ACTIVATED
- 944 PARITY ERROR
- 520 PITTED
- 211 POT LIFE EXPIRED
- 212 POTTING HARDNESS FAILURE
- 669 POTTING MATERIAL MELTING (REVERSION PROCESS)
- 938 POWER OUTPUT DIP
- 525 PRESSURE INCORRECT
- 946 PRINTOUT INCORRECT OR MISSING
- 454 PRINTED CIRCUIT BOARD TRACE OPEN

TABLE 2-9. HOW MALFUNCTIONED CODES, ALPHABETICAL LISTING (CONT'D)

CODE DESCRIPTION

- 939 PROGRAM LOADING NOT POSSIBLE
- 245 PROOF TEST/PROOFLOAD FAILS
- 248 PROOFLOAD OVERDUE
- 865 PROTECTIVE COATING/SEALANT DEFECTIVE
- 208 PULL TEST FAILURE
- 668 PUMP I SOLATION. POSSIBLY DAMAGED DUE TO LACK OF FLUID
- 540 PUNCTURED
- 213 PUNCTURE/PINHOLE
- 655 RANGE INCORRECT
- 624 RECEIVER FAULTY
- 959 REDUNDANT EQUIPMENT TRANSFER FAILURE
- 629 RELAY MALFUNCTION
- 373 RELIEF VALVE FAILED TO CRACK/RESEAT
- 005 REMOVE BEFORE FLIGHT STREAMER MISSING
- 567 RESISTANCE INCORRECT
- 384 REVERSE LEAKAGE
- 993 RF DRIVE IMPROPER
- 994 RF FEED-THRU ATTENUATED/DISTORTED

TABLE 2-9. HOW MALFUNCTIONED CODES, ALPHABETICAL LISTING (CONT\*D)

CODE

DESCRIPTION

- 995 RF FEED-THRU COMPLETELY INTERRUPTED
- 996 RF TERMINAL OVERHEATED
- 997 RF WINDOW BURNED
- 966 RF WINDOW SUCK-IN, BROKEN, OR CRACKED
- 216 ROUGHNESS/WAVINESS
- 518 ROUTING IMPROPER
- 315 RPM FLUCTUATION OR INCORRECT
- 040 SAMPLES FAILED ANALYSIS
- 583 SCOPE PRESENTATION INCORRECT OR FAULTY
- 935 SCORED OR SCRATCHED
- 030 SEAL/GASKET/O-RING DAMAGED
- 036 SEALING SURFACES FAULTY
- 635 SENSITIVITY INCORRECT
- 031 SHARP/PROTRUDING OBJECT
- 585 SHEARED
- 038 SHELF/AGE LIFE EXPIRED
- 619 SHIMMY EXCESSIVE
- 615 SHORTED

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#### TABLE 2-9. HOW MALFUNCTIONED CODES, ALPHABETICAL LISTING (CONT'D)

CODE	(CONT'D) DESCRIPTION
215	SIZE IMPROPER
770	SLIP RING OR COMMUTATOR FAILURE
011	SOLDERING FAULTY
954	SOLID PROPELLANT LINER TO CASE SEPARATION
952	SOLID PROPELLANT TO LINER OR CASE SEPARATION
953	SOLID PROPELLANT VOID
210	SONIC TEST FAILURE
964	SPECTRUM POOR
316	SPEED FLUCTUATION OR INCORRECT
279	SPRAY PATTERN DEFECTIVE
814	SQUIB BLOWN
217	STEP/GAP OUT OF TOLERANCE
218	STITCHING DEFECTIVE
660	STRIPPED
503	SUDDEN STOP
649	SWEEP MALFUNCTION
012	SWITCH FAULTY
695	SYNC ABSENT OR INCORRECT

697 TAPE, PROGRAM, OR CHECKOUT FAULTY

TABLE 2-9. HOW MALFUNCTIONED CODES, ALPHABETICAL LISTING (CONTID)

CODE DESCRIPTION

334 TEMPERATURE INCORRECT

002 TEMPORARY INSTALLED HOWR. - NOT REMOVED

665 TENSION INCORRECT

219 THERMAL SURFACE CRACKED

205 THICKNESS INCORRECT

019 THREADS GALLED

537 THRUST OR POWER LOW

039 TIME/CYCLE LIMITS EXCEEDED

636 TIME DELAY INCORRECT

784 TIRE BEAD AREA DAMAGED OR DEFECTIVE

785 TIRE INSIDE SURFACE DAMAGED OR DEFECTIVE

783 TIRE SIDEWALL DAMAGED OR DEFECTIVE

782 TIRE TREAD AREA DEFECTIVE. USE CUT, DELAMINATED, PUNCTURED, WORN, ETC, IF APPLICABLE.

947 TORN

167 TORQUE INCORRECT

023 TRANSISTOR FAULTY

623 TRANSMITTER FAULTY

> TABLE 2-9. HOW MALFUNCTIONED CODES, ALPHABETICAL LISTING

(CONT'D) CODE DESCRIPTION 877 TRANSPORTATION DAMAGE 599 TRAVEL OR EXTENSION INCORRECT 637 TRIGGERING INCORRECT 974 TUNING CURVE DOES NOT TRACK 051 TUNING DRIFTS OR FAILS 982 TUNING MECHANISM FROZEN 486 TURBINE DAMAGED, REASON UNKNOWN 806 UNAUTHORIZED BREAK OF INTEGRITY CONTROL SEAL 034 UNAUTHORIZED WORK 988 VACUUM INCORRECT 032 VACUUM TUBE FAULTY VALVE POSITION INDICATOR FAILURE VIBRATION EXCESSIVE 692 YIDEO FAULTY 207 **VOIDS** 

- 169 YOLTAGE INCORRECT
- 065 YOLTAGE STANDING WAVE RATIO HIGH
- WATERPROOFING FAULTY/MISSING
- 878 WEATHER DAMAGE

TABLE 2-9. HOW MALFUNCTIONED CODES, ALPHABETICAL LISTING (CONT'D)

DESCRIPTION

CODE

622 WET/CONDENSATION

020 WORN, CHAFED, OR FRAYED

TABLE 2-10. HOW MALFUNCTIONED CODES, NUMERICAL LISTING

CODE

DESCRIPTION

001 GASSY

002 TEMPORARY INSTALLED HOWR. - NOT REMOVED

003 BOUNCE

005 REMOVE BEFORE FLIGHT STREAMER MISSING

006 IGNITER FAILURE

007 ARCING, ARCEI)

008 NOI SY

009 DRIVE TRAIN/MOTOR FAULTY

010 FOCUS POOR OR INCORRECT

011 SOLDERING FAULTY

012 SWITCH FAULTY

013 FAN FAULTY

014 CONDUCTOR INSULATION FAULTY

015 CONDUCTOR FAULTY

016 CONDUCTOR SHIELD FAULTY

017 DI SCOLORED/STAINED

018 DRAWING/SPECIFICATION ERROR

019 THREADS GALLED

020 WORN, CHAFED, OR FRAYED

# TABLE 2-10. HOW MALFUNCTIONED CODES, NUMERICAL LISTING (CONTID)

COLE	DESCRIPTION
021	INTERFERENCE (PHYSICAL)
022	FLAKING/PEELING
023	TRANSISTOR FAULTY
024	DIODE FAULTY
025	CAPACITANCE INCORRECT
026	INTEGRATED CIRCUIT FAULTY
027	CAPACITOR FAULTY
028	CONDUCTANCE INCORRECT
029	CURRENT INCORRECT
030	SEAL/GASKET/O-RING DAMAGED
031	SHARP/PROTRUDING OBJECT
032	VACUUM TUBE FAULTY
033	DESTROYED OR REMOVED FROM SERVICE AS A RESULT OF TESTING
034	UNAUTHORIZED WORK
035	CLEANLINESS INCORRECT/VOIDED
036	SEALING SURFACES FAULTY
037	FLUCTUATES, UNSTABLE, OR ERRATIC
038	SHELF/AGE LIFE EXPIRED
039	TIME/CYCLE LIMITS EXCEEDED

;

HOW MALFUNCTIONED CODES, TABLE 2-10. NUMERICAL LISTING (CONTID)

# CODE DESCRIPTION 040 SAMPLES FAILED ANALYSIS 041 HAZARDOUS TO PERSONNEL OR EQUIPMENT 051 TUNING DRIFTS OR FAILS MODULATION INCORRECT VOLTAGE STANDING WAVE RATIO HIGH 065 070 BROKEN 080 BURNED OUT OR DEFECTIVE LAMP, METER, OR INDICATING DEVICE 086 HANDLING IMPROPER 088 GAIN INCORRECT 092 MISMATCHED PARTS, ETC. 093 DIMENSION(S) INCORRECT 105 LOOSE OR DAMAGED BOLTS, NUTS, SCREWS, RIVETS, FASTENERS, CLAMPS, OR OTHER COMMON HARDWARE 106 MISSING BOLTS, NUTS, SCREWS, RIVETS, FASTENERS, CLAMPS, OR OTHER

- COMMON HARDWARE
- 108 BROKEN, FAULTY, OR MISSING SAFETY WIRE OR KEY
- 111 BURST OR RUPTURED
- 116 CUT
- 117 DETERIORATED

# TABLE 2-10. HOW MALFUNCTIONED CODES, NUMERICAL LISTING (CONT'D)

## CODE DESCRIPTION

- 127 ADJUSTMENT OR ALIGNMENT IMPROPER
- 128 FLOW RATE INCORRECT
- 130 CHANGE OF VALUE
- 135 BINDING, STUCK, OR JAMMED
- 142 ENGINE REMOVED, EXCESSIVE MAINTENANCE
- 150 CHATTERING
- 158 LAUNCH DAMAGE
- 159 CONFIGURATION INCORRECT
- 160 CONTACTS/CONNECTION DEFECTIVE (PINS BENT/RECESSED ETC)
- 167 TORQUE INCORRECT
- 169 VOLTAGE INCORRECT
- 170 CORRODED, MILD TO MODERATE
- 177 FUEL FLOW INCORRECT
- 178 FLUID INCORRECT
- 181 COMPRESSION LOW
- 190 CRACKED
- 204 EXPLOSION
- 205 THICKNESS INCORRECT
- 206 GOUGES

TABLE 2-10. HOW MALFUNCTIONED CODES, NUMERICAL LISTING (CONT'D)

CODE DESCRIPTION

207 VOI 05

208 PULL TEST FAILURE

209 DENSITY TEST FAILURE

210 SONIC TEST FAILURE

211 POT LIFE EXPIRED

212 POTTING HARDNESS FAILURE

213 PUNCTURE/PINHOLE

214 BUBBLE/BLISTER

215 SIZE IMPROPER

216 ROUGHNESS/WAYINESS

217 STEP/GAP OUT OF TOLERANCE

218 STITCHING DEFECTIVE

219 THERMAL SURFACE CRACKED

220 WATERPROOFING FAULTY/MISSING

221 BOND FAULTY

223 GAP FILLER DAMAGED

224 GAP FILLER MISSING

230 DIRTY, CONTAMINATED, OR SATURATED BY FOREIGN MATERIAL

242 FAILED TO OPERATE OR FUNCTION, SPECIFIC REASON UNKNOWN

## TABLE 2-10. HOW MALFUNCTIONED CODES, NUMERICAL LISTING (CONT'D)

CODE	DESCRIPTION
245	PROOF TEST/PROOFLOAD FAILS
246	MAINTENANCE IMPROPER OR FAULTY
247	INSTALLED/ASSEMBLED IMPROPERLY
248	PROOF LOAD OVERDUE
249	HY DROSTAT OVERDUE
250	CALIBRATION OVERDUE
251	CALIBRATION FAULTY
253	MISFIRES
254	GAGE/METER READING INCORRECT
255	OUTPUT INCORRECT
279	SPRAY PATTERN DEFECTIVE
290	DIAGNOSTIC/AUTOMATIC TEST FAILURE
300	GROUNDED ELECTRICALLY
301	FOREIGN OBJECT DAMAGE
303	BIRD STRIKE DAMAGE
314	ACCELERATION INCORRECT
315	RPM FLUCTUATION OR INCORRECT
316	SPEED FLUCTUATION OR INCORRECT
330	HUM EXCESSIVE
334	TEMPERATURE INCORRECT

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#### TABLE 2-10. HOW MALFUNCTIONED CODES, NUMERICAL LISTING (CONTID)

CODE DESCRIPTION 350 INSULATION BREAKDOWN 372 METAL ON MAGNETIC PLUG 373 RELIEF VALVE FAILED TO CRACK/RESEAT 374 INTERNAL FAILURE 380 COMPRESSOR DAMAGED, REASON UNKNOWN 381 LEAKING, INTERNAL OR EXTERNAL 382 LIQUID LOCK 383 LOCK ON MALFUNCTION 384 REVERSE LEAKAGE 386 MAINTENANCE ACTION DUE TO LOST IN FLIGHT OCCURRENCE 396 OIL BREATHING EXCESSIVE 398 OIL CONSUMPTION EXCESSIVE 410 LUBRICATION IMPROPER 424 EXTERNAL POWER SOURCE 425 NICKED 447 LOGIC WRONG 450 OPEN 454 PRINTED CIRCUIT BOARD TRACE OPEN

457 OSCILLATING

# TABLE 2-10. HOW MALFUNCTIONED CODES, NUMERICAL LISTING (CONT'D)

CODE	DESCRIPTION
458	OUT OF BALANCE
464	OVERSPEED
469	BUSHING WORN OR DAMAGED
472	FUSE BLOWN OR DEFECTIVE CIRCUIT PROTECTOR
475	ENGINE FAILED TO START
481	KEYWAY OR SPLINE DAMAGED OR WORN
486	TURBINE DAMAGED, REASON UNKNOWN
503	SUDDEN STOP
518	ROUTING IMPROPER
520	PITTED
525	PRESSURE INCORRECT
537	THRUST OR POWER LOW
540	PUNCTURED
<b>5</b> 61	LIMITS UNA DIUSTABLE
567	RESISTANCE INCORRECT
583	SCOPE PRESENTATION INCORRECT OR FAULTY
585	SHEARED
599	TRAVEL OR EXTENSION INCORRECT
601	DETONATION

TABLE 2-10. HOW MALFUNCTIONED CODES, NUMERICAL LISTING (CONT'D)

# CODE DESCRIPTION

602 FAILED OR DAMAGED DUE TO MALFUNCTION OR ASSOCIATED EQUIPMENT OR ITEM

603 OIL IN INDUCTION SYSTEM

604 MANIFOLD PRESSURE BEYOND LIMITS

605 CRAZED

606 COUNTER RUN OFF, POSITION INDICATOR

607 NO-GO INDICATION, SPECIFIC REASON UNKNOWN

609 OUT OF TRACK

610 FAILS TO TRACK

615 SHORTED

619 SHIMMY EXCESSIVE

622 WET/CONDENSATION

623 TRANSMITTER FAULTY

624 RECEIVER FAULTY

625 GATING INCORRECT

626 INDUCTANCE INCORRECT

627 ATTENUATION INCORRECT

629 RELAY MALFUNCTION

631 BIAS VOLTAGE INCORRECT

TABLE 2-10. HOW MALFUNCTIONED CODES, NUMERICAL LISTING (CONT'D)

CODE	DESCRIPTION
632	EXPENDED (THERMAL BATTERY, FIRE EXTINGUISHER, ETC)
635	SENSITIVITY INCORRECT
636	TIME DELAY INCORRECT
637	TRIGGERING INCORRECT
638	PARAMETERS ACTIVATED
649	SWEEP MALFUNCTION
651	AIR IN SYSTEM
652	AUTOMATIC ALIGNMENT TIME EXCESSIVE
653	GROUND SPEED ERROR EXCESSIVE
654	ELEVATION INCORRECT
655	RANGE INCORRECT
656	AZ IMUTH INCORRECT
657	DISTANCE MEASUREMENT ERROR, NAVIGATION EQUIPMENT
658	BEARING DESTINATION (STATION) ERROR
660	STRIPPED
665	TENSION INCORRECT
667	CORRODED, SEVERE
608	PUMP ISOLATION, POSSIBLY DAMAGED DUE TO LACK OF FLUID

TABLE 2-10. HOW MALFUNCTIONED CODES, NUMERICAL LISTING (CONTID)

DESCRIPTION CODE 669 POTTING MATERIAL MELTING (REVERSION PROCESS) 690 VIBRATION EXCESSIVE 692 VIDEO FAULTY 693 AUDIO FAULTY 694 AUDIO AND VIDEO FAULTY 695 SYNC ABSENT OR INCORRECT 697 TAPE, PROGRAM, OR CHECKOUT FAULTY 698 CARD, PROGRAM, OR CHECKOUT FAULTY 709 ADMINISTRATIVE CONDEMNATION 710 BEARING FAILURE OR FAULTY 711 BLANKING IMPROPER 719 BROKEN OR FRAYED BONDING OR GROUND 720 BRUSH FAILURE/WORN EXCESSIVELY 729 DECOUPLED 730 LOOSE 748 FREQUENCY ERRATIC OR INCORRECT 750 MISSING

770 SLIP RING OR COMMUTATOR FAILURE

TABLE 2-10. HOW MALFUNCTIONED CODES, NUMERICAL LISTING (CONT'D)

#### CODE DESCRIPTION

- 780 BENT, BUCKLED, COLLAPSED, DENTED, DISTORTED, OR TWISTED
- 782 TIRE TREAD AREA DEFECTIVE. USE CUT, DELAMINATED, PUNCTURED, WORN, ETC, IF APPLICABLE.
- 783 TIRE SIDEWALL DAMAGED OR DEFECTIVE
- 784 TIRE BEAD AREA DAMAGED OR DEFECTIVE
- 785 TIRE INSIDE SURFACE DAMAGED OR DEFECTIVE
- 793 NO DEFECT. TIME COMPLIANCE TECHNICAL INSTRUCTION KIT RECEIVED BY BASE SUPPLY OR PARTS ARE AVAILABLE IN SUPPLY.
- 796 NO DEFECT. REMOVED FOR RELIABILITY ASSESSMENT
- 797 NO DEFECT. TECHNICAL ORDER OR OMI PREVIOUSLY COMPLIED WITH
- 798 NO DEFECT. TECHNICAL ORDER OR OMI NOT APPLICABLE. EQUIPMENT TO BE REPLACED, MODIFIED, OR NOT INSTALLED.
- 799 NO DEFECT
- 800 NO DEFECT. COMPONENT REMOVED AND/OR REINSTALLED TO FACILITATE OTHER MAINTENANCE.
- 801 NO DEFECT. TECHNICAL ORDER OR OMI COMPLIANCE

TABLE 2-10. HOW MALFUNCTIONED CODES, NUMERICAL LISTING (CONTID)

#### CODE DESCRIPTION

802 NO DEFECT. PARTIAL TECHNICAL ORDER OR OMI COMPLIANCE

803 NO DEFECT. REMOVED FOR TIME CHANGE

804 NO DEFECT. REMOVED FOR SCHEDULED MAINTENANCE OR MODIFICATION

805 NO DEFECT. NOT OTHERWISE CODED ELECTRICAL, HYDRAULIC, AIR, FUEL, OXYGEN, OIL, ETC; LINES, MECHANICAL LINKAGE AND CABLES, SERVICING A COMPONENT REMOVED/DISCONNECTED AND/OR INSTALLED/CONNECTED TO FACILITATE OTHER MAINTENANCE.

806 UNAUTHORIZED BREAK OF INTEGRITY CONTROL SEAL

812 NO DEFECT. INDICATED DEFECT CAUSED BY ASSOCIATED EQUIPMENT MALFUNCTION

814 SQUIB BLOWN

816 IMPEDANCE INCORRECT

824 GYRO FAULTY

838 B PLUS INCORRECT

846 DELAMINATED/DEBONDED

865 PROTECTIVE COATING/SEALANT DEFECTIVE

877 TRANSPORTATION DAMAGE

TABLE 2-10. HOW MALFUNCTIONED CODES, NUMERICAL LISTING (CONT'D)

# CODE DESCRIPTION

878 WEATHER DAMAGE

884 LEAD BROKEN

900 BURNED OR OVERHEATED

901 INTERMITTENT

910 CHIPPED

911 ENGINE TCTI CORRECTION CODE

916 IMPENDING OR INCIPIENT FAILURE INDICATED BY ANALYSIS

917 IMPENDING FAILURE OR LATENT DEFECT INDICATED BY NONDESTRUCTIVE INSPECTION. DO NOT USE IF OTHER CODES APPLY.

931 ACCIDENTAL OR INADVERTENT OPERATION, RELEASE, OR ACTIVATION. USE CODE 386 IF ITEM WAS LOST IN FLIGHT.

932 ENGAGE, LOCK, OR UNLOCK INCORRECT

935 SCORED OR SCRATCHED

936 IDENTIFICATION MISSING OR ERRONEOUS

938 POWER OUTPUT DIP

939 PROGRAM LOADING NOT POSSIBLE

940 COMPUTER SOFTWARE ERROR

941 NON-PROGRAMMED HALT

TABLE 2-10. HOW MALFUNCTIONED CODES, NUMERICAL LISTING (CONT'D)

# CODE DESCRIPTION 942 OPERATION OR ADDRESS ENTRY ILLEGAL 943 DATA ERROR 944 PARITY ERROR 946 PRINTOUT INCORRECT OR MISSING 947 TORN 948 NO DEFECT. OPERATOR ERROR 952 SOLID PROPELLANT TO LINER OR CASE SEPARATION 953 SOLID PROPELLANT VOID 954 SOLID PROPELLANT LINER TO CASE SEPARATION 955 DATA LINK HIGH ERROR RATE 956 COMPUTER MECHANICAL EQUIPMENT MALF UNCTION 957 DISPLAY MISSING 958 DISPLAY INCORRECT 959 REDUNDANT EQUIPMENT TRANSFER FAILURE 960 VALVE POSITION INDICATOR FAILURE 961 ANGDE CURRENT HIGH 962 ELECTRONIC POWER LOW 963 BROKEN FILAMENT/CATHODE TERMINAL

TABLE 2-10. HOW MALFUNCTIONED CODES, NUMERICAL LISTING (CONT'D)

COLE	DESCRIPTION
964	SPECTRUM POOR
966	RF WINDOW SUCK-IN, BROKEN, OR CRACKED
969	CAVITY DOES NOT RESONATE
970	COOLANT LEAK
972	DAMAGED INPUT PROBE
973	DAMAGED OUTPUT PROBE
974	TUNING CURVE DOES NOT TRACK
981	FREQUENCY INSTABILITY
982	TUNING MECHANISM FROZEN
987	INPUT PULSE DISTORTION
988	VACUUM INCORRECT
989	COOLANT FLOW RATE LOW
990	FOCUS CURRENT FAULTY
991	FREQUENCY OUT OF BAND
992	OUTPUT PULSE DISTORTION
993	RF DRIVE IMPROPER
994	RE FEED-THRU ATTENUATED/DISTORTED
995	RE FEED-THRU COMPLETELY INTERRUPTED
996	RE TERMINAL OVERHEATED

TABLE 2-10. HOW MALFUNCTIONED CODES, NUMERICAL LISTING (CONT'D)

CODE

DESCRIPTION

997 RF WINDOW BURNED